## SECTION 400.00 - PROJECT MATERIALS CERTIFICATION

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**SECTION 470.00 – MATERIALS CERTIFICATION LETTER** 470.01 Exceptions.

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#### SECTION 400.00 - PROJECT MATERIALS CERTIFICATION

ITD has implemented procedures in accordance with State and Federal regulations for ensuring the materials incorporated into highway projects meet the required contract specifications.

**401.00 Materials Certification Submittal Requirements by Project Type.** The following documents are utilized for project materials certification to demonstrate the materials incorporated into the project meet the required contract specifications:

- Materials Certification Letter (See Section 470.00)
- Materials Summary Report (See Section 420.00)
- ITD-852 Materials Certification Checklist (See Section 450.00)
- ITD-854 Resident Engineer's Letter of Inspection (See Section 430.00)
- ITD-860 Independent Assurance Test Log (See Section 440.00)

Instructions for preparing and submitting the above documents are detailed in the indicated Sections. Submittal of the required project materials certification documents to the HQ Materials Section is required within sixty (60) days after the final inspection of the construction project.

Table 400.1 lists the documents that are required for project materials certification based on funding and project type. A Materials Certification Checklist (ITD-852) is required to be submitted to HQ Materials for all projects except supply services contracts.

As shown on the table, the District Engineer's Final Letter of Acceptance is used to document project materials certification for projects not requiring submittal of a Materials Summary Report and Materials Certification Letter to HQ Materials. For these projects, the District is responsible for ensuring adequate testing and inspection for acceptance. For all projects, adequate records to document proper testing and inspection are required and must be maintained in the project files.

Table 400.1. Project Materials Certification Requirements for Projects Awarded through Roadway Design Using ITD Specifications

		SUBMITTAL TO HQ MATERIALS			
Type of Project	Are there materials incorporated in the project?	Materials Certification Checklist (ITD-852)	Materials Certification Letter and Materials Summary Report (including IA Log & RE Letter)	District Engineer Final Letter of Acceptance	
Federal-Aid	Yes	Yes	Yes	Yes	
On State Highway System	No	Yes	No	Yes	
Federal-Local On-System No State Funds	Yes	Yes	Yes	Yes	
	No	Yes	No	Yes	
Federal-Local	Yes	Yes	Yes	Yes	
Off-System No State Funds Federal-Aid Limit \$500k or more	No	Yes	No	Yes	
Federal-Local	Yes	Yes	No	Yes	
Off-System No State Funds Federal-Aid Limit less than \$500k	No	Yes	No	Yes	
State-funded	Yes	Yes	Yes	Yes	
on NHS	No	Yes	No	Yes	
State-funded	Yes	Yes	Yes	Yes	
off NHS	No	Yes	No	Yes	
Supply Services Contract	N/A	No	No	No	

## **SECTION 410.00 – REPORTS AND DOCUMENTATION**

All field test reports, laboratory test reports, certifications, and other miscellaneous reports involving inspection, testing, and acceptance of materials are a part of the documentation of project records. These reports are considered a permanent record and are to be preserved with other permanent records such as survey notes, quantity measurements, etc. These records form the basis for certifying compliance with specification requirements of the contract to state auditors and the Federal Highway Administration for the materials used in construction.

The project files must sufficiently document that the acceptance of material was performed in accordance with the minimum testing requirements and the contract specifications. Specific instructions for each test report form are to be followed with the understanding that complete documentation is required for each contract. Any reports or records that apply from another contract should be either duplicated or must be completely referenced. There must be no doubt of the validity of the record applying to the pertinent project.

**410.01 Materials Acceptance Plan (MAP) or ITD-862 Sampling Schedule.** The project personnel must plan ahead using the minimum testing requirements (MTRs) and the contract specifications to determine the requirements for acceptance of all bid items and change orders. Each district is encouraged to develop a project Materials Acceptance Plan (MAP) or ITD-862 Sampling Schedule for reference by the project personnel during construction.

The development of the MAP or Sampling Schedule should be a joint effort by District Materials and the project personnel. The final MAP should summarize the acceptance requirements for all items including any small quantities (see Section 270.04), items using nonstandard acceptance (see Section 270.05) or special provision items (see Section 270.06). The final MAP should be reviewed and signed by the Resident/Regional Engineer and the District Materials Engineer. A copy of the final signed MAP should be provided to HQ Materials. When requested by the District, HQ Materials will review and provide comment on the MAP. HQ Materials will also reference the MAP during review of the Materials Certification Letter and Materials Summary Report.

**410.02 Checking Test Reports and Documents.** Laboratory tests, field tests, and certification reports are forwarded to the Regional/Resident Engineer whose staff regularly checks the reports so deviations from specifications and poor documentation are minimized. It is recommended the person checking test reports have current WAQTC qualification. Any discrepancies, lack of information, or incompleteness of the reports must be corrected without delay. After the checks are made, the reports are recorded for the Materials Summary Report (see Section 425.00 for directions) and placed in the project files.

Any items receiving less than the minimum requirements of sampling and testing and/ or varying from specifications must have the corrective action or remedy efforts explained by the Regional/Resident Engineer. The explanation must include the justification for acceptance, rejection, or price adjustment of noncompliant material. The explanation is recorded and noted for the Materials Summary Report.

## **SECTION 420.00 - MATERIALS SUMMARY REPORT**

The Materials Summary Report shows the basis for acceptance of all bid items and change orders of the contract as required by the minimum test requirements (MTRs) and contract specifications including:

- Acceptance test results.
- Manufacturer's certifications.
- Laboratory acceptance and verification test results.
- Notes to explain the resolution for any failing test results or lack of minimum testing.
- Notes to explain the basis for accepting any material not tested or not certified according to the minimum testing requirements or contract specifications.

The MSR is compiled for each construction contract as indicated in Table 400.1 by posting all of the field and laboratory test reports and manufacturer's certifications into the electronic Materials Summary Program or other method approved by HQ Materials. The data should be posted daily or at least weekly to ensure current reporting. All test reports will be posted as soon as possible after they are received and checked. The MSR must be kept up to date. It is expected the MSR will be current with the current pay estimate.

When the electronic Materials Summary Program is used, the MSR should be printed after each pay estimate and kept in a binder or file folder for easy access.

Adequate documentation of failures and/or deviations from specification requirements must be included in the Materials Summary Report to justify acceptance, rejection, or price adjustment of contract items. Section 215.00 contains details about documentation for non-compliant material.

## SECTION 425.00 – COMPLETING THE MSR

The following guidelines are provided for use in typical project situations to accurately complete a project Materials Summary Report (MSR).

The acceptance documents are posted in the MSR under the contract item where the material was paid. When material is incidental to a contract item the posting will be shown under the associated contract item.

- The posting can be done on Excel or Word generated forms, the electronic program, or in dark ink on hand-written sheets.
- Every contract item, including change orders, where there was material used on the project must be included in the MSR.
- Some contract items will have multiple posting in the MSR because there is more than one acceptance requirement as shown in the MTR tables.

Use Table 425.1 to determine the minimum information required in the MSR. Find the contract bid item in Section 270.00 MTR tables of the Quality Assurance Manual, and from the MTR tables identify the type of acceptance requirements. Then, find the type of acceptance in the left column of the table below and provide the required information in the MSR as is described in the corresponding right hand column.

Table 425.1

Acceptance Type from MTR tables	Postings Required in the MSR				
Statistical	Copy of Bonus Summary Report showing the pay factor for each lot				
Analysis	Remarks explaining actions taken when any lot falls below .85 or below .75				
(QA Special	Copy of F&t report for each day of production testing				
Provisions)	Remarks to indicate evaluation procedures taken when there is a t test failure				
	Date sampled				
Field Tests (other than statistical	Test number				
	Indication of pass or fail test results				
	A remark indicating the location of the in-place density test for pipe or structure backfill				
analysis) 1	Remarks to indicate tests that are considered check tests for failing tests				
anary sis)	Remarks to indicate the corrective action taken for a failing test				
	Remarks to indicate acceptance when testing is not performed, such as, too granular to				
	test				
*	in-place density, gradation, sand equivalent, fracture count, cleanness value, field				
saybolt viscosity, presence of anti-strip additive, asphalt content of plant mix, plant mix test strip,					
air/slump/temperature/unit weight of concrete)					
Manufacturer's	Date certification statement signed				
or Fabricator's	Quantity of material certified				
Certification	Manufacturer or fabricator company signing certification				

Table 425.1 (Continued)

Acceptance Type from MTR tables	Postings Required in the MSR
	Date sampled
Laboratory	Sample number
Verification	Laboratory number
Tests	Indication of pass or fail test results
	Remarks to indicate corrective action or price adjustment for a failing test
	Date sampled
Laboratory	Sample number
Acceptance	Laboratory number
Tests	Indication of pass or fail test results
·	Remarks to indicate corrective action or price adjustment for a failing test
Pre-Tested or Pre-Approved Tests (Approved Lists)	Remarks to indicate the material/product used on the project is included on the approved list maintained by HQ Materials Section
Acceptance by Inspection	Item will be shown on the ITD-854, Resident Engineer's Letter of Inspection
Small Quantity or Non- Standard Acceptance (see Section 270.04 & 270.05)	Remarks to summarize the basis of acceptance including the following where applicable:  • Remarks to indicate aggregates obtained from approved materials source  • Remarks to indicate mix design approval for plant mix or concrete  • Post core test results for plant mix paving on mainlines or intersections  • Remarks to indicate visual inspection during installation, placement or compaction
	Post acceptance information as indicated in the special provision OR as indicated below if not specified in the special provision.
Special Provisions (see Section 270.06)	When material is included in MTR table and used in a standard application, find MTR acceptance type above and post the same information
	When special provision indicates the material must meet a given specification, such as AASHTO or ASTM: Post same information shown above for manufacturer's certification.
	When material is not included in MTR tables or not used in standard application: Remarks to summarize basis of acceptance as determined by the Engineer and District Materials Engineer.
Change Orders (see Section 270.07)	Post acceptance information as indicated in the change order OR as indicated below if not specified in the change order.
	For standard pay items or when material is included in MTR tables and used in a standard application, find MTR acceptance type above and post the same information.  When change order indicates the material must meet a given specification, such as
	AASHTO or ASTM: Post same information shown above for manufacturer certification.
	When material is not included in MTR tables or not used in standard application: Remarks to summarize basis of acceptance as determined by the Engineer and District Materials Engineer

## SECTION 430.00 - RESIDENT ENGINEER'S LETTER OF INSPECTION (ITD-854)

The purpose of the Resident Engineer's Letter of Inspection (ITD-854) is for the Regional/Resident Engineer to document the inspection of certain materials and to document the materials are acceptable according to the plans and specifications. The form should not be used as a catch-all for items usually accepted by sampling and testing, and inclusion on the form does not excuse the inspector from sampling and testing or obtaining manufacturer certifications, as required by the Minimum Testing Requirements. A copy of the completed RE Letter will be submitted with the MSR at the completion of the project. See Section 250.00 for complete information on the Resident Engineer's Letter of Inspection.

## SECTION 440.00 - INDEPENDENT ASSURANCE TEST LOG (ITD-860)

Independent Assurance tests are not posted in the Materials Summary Report, but are recorded on the IA Test Log (form ITD-860) by the ITD project personnel. A copy of the completed IA Test Log will be submitted with the MSR at the completion of the project. See Section 370.00 for information on completion of the IA Test Log.

## **SECTION 450.00 – MATERIALS CERTIFICATION CHECKLIST (ITD-852)**

The Resident/Regional Engineer's office prepares the ITD-852 Materials Certification Checklist by completing each checkbox shown on the form. Explanations must be included in the "Remarks" field for any items checked "No". Known exceptions to the materials acceptance requirements for the project will be identified on the form. Once complete the checklist is provided to the Resident/Regional Engineer and Assistant District Engineer for review and signature.

The Materials Certification Checklist must be submitted to HQ Materials with the Resident/Regional Engineer and Assistant District Engineer signatures for all projects. For projects not requiring a Materials Summary Report per Table 400.1 check the appropriate box to indicate no Materials Summary Report is required and complete the remainder of the form as applicable for the project.

Key Number(s)		Project Number(s)	County				
Contr	Contract Number Location		Work Authority				
□ A	☐ A Materials Summary Report is not required per QA Manual, Section 400.01, Table 400.1						
			Yes	No*	N/A		
1.	All bid items and change orders requiring materials acceptance are included in the Materials Summary Report			_			
Rema	arks:						
2.	Each contractor-furnished source used on the project was approved prior to use						
Rema	arks:						
3.	The acceptance testing frequency for all contract items is in conformance with the Minimum Testing Requirements and the contract plans and specifications						
Rema	arks:						
4.	Independent Assurance evaluations and to	ests were performed as required					
Rema	arks:						
5.	<ol> <li>Independent Assurance evaluations and test results compare favorably with project sampling and testing</li> </ol>			_			
Rema	arks:						
6.	Justification is provided for all material which was accepted and incorporated into the project but which failed to meet specifications when tested			_			
Rema	arks:						
7.	. A price adjustment was applied where allowed for non-specification material used						
Rema	arks:						
Manufacturer's certifications comply with the requirements to list the project number, the contract item number, the quantity of material certified with lab test results attached where applicable, and signed by a person having quality control responsibility.				_	_		
Rema	arks:						
9.	Manufacturer's certification quantities repr	resent the project item final quantities					
Rema	arks:						
* A "N	* A "No" response requires an explanation in the remarks area, including a list of contract items that are affected.						
The following items are exceptions to the material acceptance requirements and will be listed on the Final Materials Certification Letter signed by the District Engineer:							
Resid	ent/Regional Engineer (Printed or Typed))	Resident/Regional Engineer's Signature	Date:	:			
	Assistant District Engineer Over Construction Assistant District Engineer Over Construction's Signature				Date		

## SECTION 460.00 - DISTRICT AUDIT OF MATERIALS SUMMARY REPORT

The District IA Inspector is responsible for the audit of the Materials Summary Report for all projects. This should be done periodically as the project progresses. The IA Inspector will complete form ITD-858, District Independent Assurance Inspector's Records Review, to document each records review. A close-out will be held with ITD project personnel to discuss any deviations found and to obtain a resolution statement. See Section 360.01. A copy of the completed ITD-858 will be provided for the project files, HQ Materials, and HQ Construction.

When a project is completed, the Regional/Resident Engineer will prepare and submit an ITD-852, Materials Certification Checklist; ITD-854, Resident Engineer's Letter of Inspection; ITD-860, Independent Assurance Test Log and a completed Materials Summary Report (MSR) to the District Materials Engineer as required per Table 400.1. Submittal of the completed MSR and accompanying documents should not be delayed due to payment of a claim or final estimate unless materials acceptance is involved.

The IA Inspector will make a thorough, final audit of the Materials Summary Report and associated documents verifying that all test reports, manufacturer's certifications, inspection reports, and any other pertinent information and reports have been recorded, and that such documents contain the required information. The IA Inspector should use the most current pay estimate as a guide to determine that material paid for was accepted per the contract requirements. Any deviations or exceptions found during the review must be resolved before the District Materials Engineer prepares the Materials Certification Letter for the District Engineer's signature.

## SECTION 470.00 - MATERIALS CERTIFICATION LETTER

When the MSR and associated documentation is considered acceptable, the IA Inspector or the District Materials Engineer will prepare the Materials Certification Letter using the inter-department memo (ITD-500) addressed to the HQ Materials Engineer (see Example 470.1 at the end of this section). The Materials Certification Letter is prepared and submitted along with a copy of ITD-860, IA Test Report Log; ITD-852, Materials Certification Checklist; the Materials Summary Report; and ITD-854, Resident Engineer's Letter of Inspection of Contract Items, to the District Engineer for review, signature and distribution.

The Materials Certification Letter must contain the following statement (per 23 CFR 637):

This is to certify that:

The results of the tests used in the acceptance program indicate that the materials incorporated in the construction work, and the construction operations controlled by sampling and testing, were in conformity with the approved plans and specifications. All independent assurance samples and tests are within tolerance limits of the samples and tests that are used in the acceptance program.

Explanations for exceptions to the plans and specifications are as follows:

The Materials Certification Letter will list, by contract item, any exceptions and how they were resolved, which includes an explanation for justification of acceptance of the contract item. See Example 470.1 at the end of this section.

**470.01 Exceptions.** An exception is considered any instance where non-specification material is identified, the non-specification material is allowed to remain, and corrective action was required. A failing test with an immediate passing check test is not considered non-specification material. Corrective action is remedial methods, such as price adjustments or contractor repair work.

When there are indications of acceptance of non-specification material in the materials summary report, then the corrective action taken must be included in the summary remarks and in the certification letter. For QA Special Provision contract items, non-specification material is a lot where the pay factor for any quality characteristic is below 0.75 and the material was allowed to remain.

An exception is also when contract specifications and/or minimum testing requirements were not met. This may be lack of acceptance testing, lack of IA testing, or lack of manufacturer's certifications. It is usually not possible to remedy or justify these exceptions, especially if not discovered until the project is complete. A full explanation of the circumstances is necessary to ascertain the consequences of the deviation from the specifications, including the quantities accepted without the required testing or certifications. In some cases, FHWA may not participate in the quantity of material involved.

Exceptions should be listed by contract item number on the Materials Certification Letter as follows:

- Number of tests representing non-specification material out of the total number of tests performed with remarks for justification that allowed material to remain in place.
- Total number of tests performed and number of tests required by the minimum testing requirements when the number of tests performed is less than the required minimum, including lack of or failure to perform Independent Assurance testing.
- Lack of required manufacturer's certifications covering the quantity of material paid for.

- QA Special Provision item where the pay factor was less than 0.75 and a description of action taken.
- QA Special Provision item where t test failed and there is no indication an evaluation was made.
- Price adjustment, if applied, or justification for acceptance or rejection of material with failing laboratory test.

470.1 Materials Certification Letter Example

ITD-500 4-93

## IDAHO TRANSPORTATION DEPARTMENT

## **Department Memorandum**

DATE:	PROJECT NO	(S)
DAIL.	INOJECIN	$\mathbf{v}$

TO: HQ MATERIALS ENGINEER KEY NO.(S):

FROM: NAME PROJECT ID, CNTY, ETC.:

DISTRICT \_\_\_ ENGINEER

**RE:** MATERIALS CERTIFICATION LETTER

This is to certify that:

The results of the tests used in the acceptance program indicate that the materials incorporated in the construction work, and the construction operations controlled by sampling and testing, were in conformity with the approved plans and specifications. All independent assurance samples and tests are within tolerance limits of the samples and tests that are used in the acceptance program.

Explanations for exceptions to the plans and specifications are as follows:

- 303-005A 19mm Aggregate Base: Lot #3 had a pay factor of .74 and was removed and replaced by the contractor.
- 405-025A PL MX PAV CL I: Acceptance Test Strip #1 failed and was paid at 50%.
- 602-035A 450mm Pipe Culvert: There are no required manufacturer's certifications for 150 meters of pipe.
- 640 Subgrade Geotextile: No required laboratory verification tests were performed. The item was accepted by manufacturer's certification.
- S501-010 MSE Retaining Wall: The ITD laboratory test was failing for cement and a price adjustment of 25% was applied.

The original of the Materials Summary Report, correspondence, manufacturer's certifications, and test reports are on file in the project records.

cc: HQ MTLS IAC w/attach

DE \_\_\_ ADE

DMTL E w/attach RE (original attach)

# SECTION 480.00 – SUBMITTAL OF MATERIALS SUMMARY REPORT AND MATERIALS CERTIFICATION LETTER TO HQ MATERIALS

The original and one copy of the signed Materials Certification Letter; one signed copy of ITD-852, Materials Certification Checklist; one copy of the Materials Summary Report, including QA Special Provision reports and the final or most current estimate; one signed copy of ITD-854, Resident Engineer's Letter of Inspection of Contract Items; and one signed copy of ITD-860, Independent Assurance Test Log, shall be forwarded by the District Materials Engineer to the Independent Assurance Coordinator at HQ Materials Section. The originals of these forms are retained for the project files by the Resident/Regional Engineer.

## Distribution by the district:

- DE
- ADE
- RE retain originals ITD-852, MSR, ITD-854, ITD-860
- DME w/attach
- HQ MTLS IAC w/attach

# SECTION 490.00 – HQ MATERIALS REVIEW OF CERTIFICATION LETTER AND MATERIALS SUMMARY REPORT

The HQ Materials Section Independent Assurance Coordinator (IAC) will review the Materials Summary Report and Materials Certification Letter for accuracy and completeness. The Materials Summary Report must provide sufficient information to ascertain that the material incorporated was accepted in accordance with the minimum testing requirements and contract specifications. The Certification Letter must be accurately supported by the information provided in the Materials Summary Report and the Materials Summary Report, including exceptions, must be accurately described by the Certification Letter.

The IAC will notify the District Materials Engineer of any deficiencies identified during the review of the Materials Summary Report and Certification Letter. The district may provide additional information, if available, or make corrections as quickly as possible so as to not delay the completion of the review. The review will be completed within sixty (60) days from the date of receiving the submittal.

The review report and a copy of the Materials Certification Letter are distributed at the completion of the review by memorandum from the Materials Engineer. Items determined ineligible for Federal Funds due to lack of proper acceptance will be identified when applicable.

Distribution by HQ Materials Section:

- FHWA (only on projects with full oversight)
- FS
- CONSTR
- DE
- ADE
- RES/REG ENG
- DME
- DRI